

CLAIMS

What is claimed is:

1. A method of selecting a printer on a network to receive a file to be printed on the instigation of a mobile device, the method comprising:
 - 5 sending at least one user preference from the mobile device to a networked print controller, the print controller having access to predetermined properties of a plurality of networked printers,
 - matching at least one of the predetermined properties of the plurality of networked printers with the at least one user preference, and
 - 10 selecting the printer that is to print the file in accordance with the results of matching at least one of the predetermined properties of the plurality of networked printers with the at least one user preference.
2. The method of claim 1, wherein the user preference comprises a current location of the mobile device and the method further comprises:
 - 15 determining a location of the mobile device relative to at least one wireless communication point of the network by measuring a transmitted wireless signal strength of the at least one wireless communication point at the current location of the mobile device;
 - 20 wherein sending at least one user preference from the mobile device to a networked print controller comprises transmitting the measured signal strength to the print controller via the network;
 - wherein matching at least one of the predetermined properties of the plurality of networked printers with the at least one user preference comprises comparing the measured wireless signal strength at the mobile device with a plurality of stored wireless signal strengths of the at least one communications point at each of the printer locations; and
 - 25 wherein selecting the printer that is to print the file comprises selecting a printer to send the file to having the best match resulting from comparing the measured wireless signal strength at the mobile device with a plurality of stored

wireless signal strengths of the at least one communications point at each of the printer locations.

3. The method according to claim 1, further comprising selecting at least one print
5 requirement for the file, and communicating the print requirement to the print
controller, wherein matching at least one of the predetermined properties of the
plurality of networked printers with the at least one user preference comprises
comparing the at least one print requirement with the predetermined abilities of each
of the networked printers and the selecting step comprises excluding all printers that
10 do not have the desired at least one print requirement.

4. The method according to claim 2, further comprising selecting at least one print
requirement for the file, and communicating the print requirement to the print
controller, wherein matching at least one of the predetermined properties of the
15 plurality of networked printers with the at least one user preference comprises
comparing the at least one print requirement with the predetermined abilities of each
of the networked printers and the selecting step comprises excluding all printers that
do not have the desired at least one print requirement.

20 5. The method according to claim 1, wherein the predetermined abilities of the
printers are stored in the print controller and the method further comprises retrieving
the stored predetermined abilities.

6. The method according to claim 1, wherein the predetermined abilities of the
25 printers are stored remotely from the print controller and the method further
comprises retrieving the stored predetermined abilities from the remote store.

7. The method according to claim 2, wherein the predetermined abilities of the
printers are stored remotely from the print controller and the method further
30 comprises retrieving the stored predetermined abilities from the remote store.

8. The method according to claim 3, wherein the predetermined abilities of the printers are stored remotely from the print controller and the method further comprises retrieving the stored predetermined abilities from the remote store.
- 5 9. The method according to claim 1, wherein matching at least one of the predetermined properties of the plurality of networked printers with the at least one user preference comprises comparing at least one of the current number and size and print jobs in each of the printers' memories and selecting the printer that is to print the file comprises selecting the printer with the lowest number and/or size of
10 print jobs.
10. The method according to claim 2, wherein selecting the printer that is to print the file comprises selecting the printer having its strongest signal strength from the same wireless communication point as that of the strongest signal strength of the
15 mobile device.
11. The method according to claim 2, wherein the network comprises a plurality of wireless communication points and the strongest signal strengths of the printer and the mobile device are equal, and selecting the printer that is to print the file further
20 comprising selecting the printer having its second strongest signal strength from the same wireless communication point as that of the second strongest signal strength of the mobile device.
12. In the method according to a claim 2, wherein the network comprises a plurality
25 of wireless communication points and selecting the printer that is to print the file comprises selecting the printer having the largest number of non-zero signal strengths of the wireless communication points in common with the measured signal strengths at the mobile device.
13. The method according to a claim 2, further comprising displaying to the user a
30 list of details of a plurality of best-matched printers suitable for unique selection and

selecting the printer that is to print the file further comprising the user manually selecting one of the printers on the list.

14. The method according to claim 13, wherein displaying to the user a list of details of a plurality of best-matched printers suitable for unique selection comprises displaying the actual location of each of the plurality of best-matched printers.

15. The method according to claim 2, further comprising sending to the mobile device a map of directions to the selected printer, a set of audio or written directions to the selected printer or a selected printer location name.

16. A method of printing a file to a networked printer at the instigation of a mobile device, the method comprising:

selecting a networked printer comprising:

15 sending at least one user preference from the mobile device to a networked print controller, the print controller having access to predetermined properties of a plurality of networked printers,

matching at least one of the predetermined properties of the plurality of networked printers with the at least one user preference, and

20 selecting the printer that is to print the file in accordance with the results of matching at least one of the predetermined properties of the plurality of networked printers with the at least one user preference; and

transmitting the file to the selected printer for printing.

25 17. The method according to claim 16, wherein the file is stored on the mobile device, is transmitted to the print controller via a wireless communication point and subsequently forwarded onto the selected printer for print out.

30 18. The method according to claim 16, wherein the file is stored on a networked file server, is selected by the mobile device and subsequently sent to the selected printer for print out by the print controller.

19. The method according to claim 16, further comprising accessing the relevant printer driver for the selected printer from a plurality of printer drivers stored at the print controller or a networked location accessible by the print controller.

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20. The method according to claim 17, further comprising accessing the relevant printer driver for the selected printer from a plurality of printer drivers stored at the print controller or a networked location accessible by the print controller.

10 21. The method according to claim 18, further comprising accessing the relevant printer driver for the selected printer from a plurality of printer drivers stored at the print controller or a networked location accessible by the print controller.

22. An apparatus adapted to select a network printer to receive a file to be printed
15 on the instigation of a mobile device, the network having at least one communications point for providing access to devices on the network from the mobile device, the apparatus comprising:

a print controller connected to the network and having access to predetermined properties of a plurality of networked printers; the print controller
20 being arranged to receive at least one user preference from the mobile device via the communications point; and

a matching arrangement adapted to match at least one of the predetermined properties of the printers with the at least one user preference, and to select the printer that is to print the file in accordance with results of the match.

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23. A program storage device, readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method of selecting a printer on a network to receive a file to be printed on the instigation of a mobile device, the method comprising:

sending at least one user preference from the mobile device to a networked print controller, the print controller having access to predetermined properties of a plurality of networked printers,

- 5 matching at least one of the predetermined properties of the plurality of networked printers with the at least one user preference, and

 selecting the printer that is to print the file in accordance with the results of matching at least one of the predetermined properties of the plurality of networked printers with the at least one user preference.

- 10 24. The program storage device of claim 23, wherein the user preference comprises a current location of the mobile device and the method further comprises:

 determining a location of the mobile device relative to at least one wireless communication point of the network by measuring a transmitted wireless signal strength of the at least one wireless communication point at the current location of the mobile device;

- 15 wherein sending at least one user preference from the mobile device to a networked print controller comprises transmitting the measured signal strength to the print controller via the network;

- 20 wherein matching at least one of the predetermined properties of the plurality of networked printers with the at least one user preference comprises comparing the measured wireless signal strength at the mobile device with a plurality of stored wireless signal strengths of the at least one communications point at each of the printer locations; and

- 25 wherein selecting the printer that is to print the file comprises selecting a printer to send the file to having the best match resulting from comparing the measured wireless signal strength at the mobile device with a plurality of stored wireless signal strengths of the at least one communications point at each of the printer locations.

- 30 25. A program storage device, readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method of printing a

file to a networked printer at the instigation of a mobile device, the method comprising:

selecting a networked printer comprising:

5 sending at least one user preference from the mobile device to a networked print controller, the print controller having access to predetermined properties of a plurality of networked printers,

matching at least one of the predetermined properties of the plurality of networked printers with the at least one user preference, and

10 selecting the printer that is to print the file in accordance with the results of matching at least one of the predetermined properties of the plurality of networked printers with the at least one user preference; and

transmitting the file to the selected printer for printing.

26. The program storage device of claim 25, wherein the file is stored on the mobile
15 device, is transmitted to the print controller via a wireless communication point and subsequently forwarded onto the selected printer for print out.

27. The program storage device of claim 25, wherein the file is stored on a networked file server, is selected by the mobile device and subsequently sent to the
20 selected printer for print out by the print controller.

28. The program storage device of claim 25, further comprising accessing the relevant printer driver for the selected printer from a plurality of printer drivers stored at the print controller or a networked location accessible by the print controller.